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Working beyond state pension age. Does Work history matter?

Dr Naomi Finch

Abstract

Work history is likely to influence a decision to work beyond state pension age (SPA), since income in old age is influenced by years worked, level of earnings, occupation and timing of career. Thus, you would expect those with broken work histories to be more likely to work beyond SPA with the view to supplement their income, and build up greater pension provision for the future. However, there is evidence that having a low income does not always lead to high propensity to work beyond SPA: Those with the lowest financial resources are less likely to work longer, even controlling for other factors. This may be a reflection of careers in lower-skilled positions, with fewer labour market opportunities in old age. Thus, it may be that work life histories interact with income levels to influence extending working life.

This paper attempts to examine quantitatively how work history influences the likelihood of working beyond SPA. It undertakes secondary longitudinal data analysis using retrospective work history data for the first 14 waves of the British Household Panel Survey to summarise work histories, including labour market attachment. Logistic regression is used to understand the impact of work histories on working beyond SPA, holding income and other factors constant.

It finds that high personal income reduces the odds of working longer, even after controlling for other factors, but that work history is important even after income (and other factors) have been accounted for. Moreover, whilst lengthy years in employment increase the likelihood of working longer, periods of inactivity reduce the likelihood. This indicates that those with broken work histories, and seemingly in the most financial need, are less likely to undertake work beyond SPA, perhaps due to reduced negotiating power in the labour market.

Key words: Extending work; Life history research; Pension income; Work; British household panel survey

Introduction

The ageing population and the strain it places upon the pension pot has meant that encouraging people to extend work beyond the current state pension age (SPA) to build up pension income is high on the political agenda. However, relatively little is known about why people extend working life. Most research has focused upon reasons why people exit the labour market *before* reaching state pension age. There has, however, been less attention to the factors associated with working *beyond* state pension age.

This article examines the effect that work history has upon working beyond state pension age. Whilst other studies have found an association between tenure, ethnicity, caring status, health status, partner's working status, regional unemployment levels, and financial position and working longer (Smeaton and McKay, 2003; Humphrey *et al.*, 2003; Sainsbury, Finch and Corden 2006; Barnes,

Parry, and Taylor 2004; Phillipson and Smith, 2005), the impact of work history has yet to be studied. However, work history is likely to influence a decision to extend paid work, since pension income in old age is influenced by years worked, level of earnings, occupation and timing of career (Ginn, 2003). Thus, you would expect those with broken work histories to be more likely to work beyond SPA with the view to supplement their income, and build up greater pension provision for the future.

However, there is evidence that having a low income does not always lead to high propensity to work beyond state pension age (Sainsbury, Finch and Corden 2006; Barnes, Parry, and Taylor 2004). Those with particularly low savings and lower skills (having left full time education early) are *less* likely to work beyond state pension age. Even controlling for education and health levels, those with the lowest financial resources are the least likely to work (Smeaton and McKay, 2003). The OECD have pointed towards entitlement to Income Support and other means tested benefits as a disincentive to employment, with returning to work compromising these entitlements. However, even in the USA, where access to benefits is minimal, employment after state pension age amongst the poorest is still relatively low (Lain, 2011). Thus, means tested benefits do not wholly explain low employment levels amongst those in most financial need.

It may be that work history plays a role, with individuals with low savings more likely to have had careers in lower-skilled positions, with fewer labour market opportunities. As a result, they may have less negotiating power in the labour market to enable them to continue working beyond state pension age (Smeaton and McKay, 2003). Thus, it may be that work life histories interact with income levels to influence extending working life.

There is also evidence that people extend working life for non-financial reasons. Smeaton and McKay (2003) found that those working over state pension age had greater job satisfaction than those under state pension age, and were also less likely to want to leave work in the following year. Qualitative studies have suggested that this is related to work history and orientations (Barnes, Parry, and Taylor 2004; Sainsbury, Finch and Corden 2006). Those with established careers in the professional services, with a fairly high degree of choice and flexibility over what they do, are more likely to extend working life for reasons of job satisfaction (Barnes, Parry, and Taylor 2004; Sainsbury, Finch and Corden 2006). These findings give some insight of how work history may influence propensity to extend working life, regardless of retirement income level.

This paper attempts to examine quantitatively how work history influences the likelihood of working beyond SPA. The primary aim is to explore the relationship between labour market attachment and working beyond state pension age. But it also explores the impact that income has upon a decision to extend work, and seeks to go some way to understand whether work history matters, regardless of income in a decision to work longer. If individual financial circumstances are the driver of working longer, we would expect those with full uninterrupted employment histories to be less likely to work longer than those with more interrupted, part time employment. If, however, those with interrupted work

histories are *less* likely to work longer, something other than income is driving a decision to work longer. Also, if work history was important, despite income, then we would expect it to remain significant, even after income is accounted for. Whilst there are important gender differences in relation to work history and working longer, these are not the focus of this paper, and have been explored elsewhere (see Finch, 2011).

Method

This paper estimates quantitatively how working beyond state pension is related to income and work history. To do this, secondary longitudinal data analysis is undertaken using retrospective life history data for the first 14 waves (1991 – 2004) of the British Household Panel Survey (BHPS). The data crucial for the study was obtained from the BHPS's retrospective employment history files. Retrospective labour market data has been collated since leaving full time education, including employment status (in wave 2). In addition, the survey collates the same information in each successive wave for the period since the last interview, which has been used to extend employment histories up to wave 14. The retrospective data and the Panel data is collated in two separate files deposited in the UKDA which were merged (Halpin, 1997; Halpin, 2000). The merged dataset includes information on individuals' self reported employment status at monthly intervals. From this, work histories were summarized through the construction of different variables, based on different ways of classifying individual's work histories, as developed by Sefton, Evandrou and Falkingham (2008, 2011).

Work histories are defined from the age of 20 up to state retirement age (60 for women and 65 for men). To be included in the sample, individuals must have complete work histories between the ages of 20 and state pension age. Respondents are also required to have non-missing information on whether they were in paid work after state pension age. In addition, they must be aged over state pension age at some point during the panel (1991 – 2004). Respondents are also only included if they had non-missing gross personal income data from at least one of the panel years. Personal income was used for the analysis, because this is considered to be more strongly related to individual's work histories. While equivalised household income is arguably a better measure of people's material living standards, and partner's income may be important for a decision to work longer, the inclusion of partners' incomes will in many cases obscure the impact of married people's own incomes derived from their own work histories¹. The overall income measure is monthly personal non-labour income after state pension age. This comprised of benefits, investment and saving income, and pension income. Certain income sources were examined in more detail – namely income from private pension, occupational pension, investments and savings, and income support. As individuals are observed at multiple points in time, up to 14 years apart, incomes are adjusted to May 2010 prices according to the retail price index. The sample was trimmed to exclude observations with very low or very high income data.

Individuals can be observed up to 14 times during the panel period. Whilst work and family life history remain the same over the panel, other factors may change after state pension age, such as health status, which may impact upon a decision

to work or not. Therefore, so this information is not lost, all observations of the same individual are included in the sample. The data was weighted to allow for multiple observation of the same individual. This yields a total sample of 21682 observations on 2677 individuals, 7641 observations of 996 men and 14041 observations of 1681 women.

Defining work after state pension age

The task of defining what constitutes work after state pension age is not a straightforward one. It was considered that work history would impact upon working after state pension age at whatever time this occurred. Capturing the entire of pensioners' work histories up until the final panel observation would therefore enable a fuller picture to be obtained. To do this, information from individuals' post retirement work history was collated from the retrospective files. This enabled employment data to be collated for the period of their retirement up until wave 14 of the panel, even if their retirement period began prior to the first year of the panel survey. A summary variable detailing the total number of years in paid work post state pension age up until wave 14 was created. Individuals were grouped as 'extenders' and 'non-extenders'. 'Non-extenders' include those who have retired at or before state pension age, and will not have undertaken any paid work beyond state pension age up to the most recent observed wave (prior to 2004). After exploratory analysis, an extender was defined as working for any period of time at any point after state pension age. Thus, older people were defined as extenders if they undertook paid work for at least a month at any point after state pension age. Detailed information on hours worked was not included in the retrospective files, and therefore pensioners could be working for any number of hours as long as they defined themselves to be in paid work.

Analysis

Work histories were summarised according to different indicators within the broad areas of employment status history. These indicators were adopted from Sefton, Evandrou and Falkingham's (2011) study. They were:

- Pattern of employment (years in employment; timing of career; mainly part-time/mixed/mainly full-time).
- Interrupted work history (short break; persistent break; recurrent breaks; timing of breaks).
- Reason for breaks (e.g. caring, incapacity, unemployment).

Binary logistic regression was used to examine how income and work history influence the likelihood of working beyond state pension age, whilst holding other factors constant. The variables controlled for were:

- Socio-demographic characteristics (sex, marital status, tenure);
- Health status (limiting disability, any income from disability living allowance, any income from attendance allowance, health over the last year),

- Access to job opportunities (access to a car, region, educational qualifications),
- Financial resources (total income excluding earnings, any income from private pension, any income from occupational pension, any income from investments or savings, any incomes from income supportⁱ, future financial expectations).
- Birth cohort and years since reaching state pension age were also included. These account for the different pension systems and rules, which may influence working beyond state pension age.

Working after state Pension age

Before examining the impact that income and work history have upon working beyond state pension age, it is useful to gain a picture of the proportions working beyond state pension age. More than a quarter of the sample (28.5 percent) had undertaken some paid work for at least a month at any point after state pension age up to the last observed panel year. This is a relatively high proportion, compared to the national snap shot average - 9.1 percent of over 65s were economically active in Dec-February 2011. However, the snap shot average gives a picture of the proportion economically active at a given time, whereas this figure takes into account any employment over the entire observation period. Thus it captures those who had undertaken employment at any point post state pension age (up to the final observation year), rather than in a particular year. Second, there is likely to be a cohort affect. The oldest pensioner in our panel turned state pension age in 1955, when working beyond state pension age was more prevalent – in 1971, for example, 30 percent of men aged 60-69 were economically active compared to 13 percent in 2001, and 11.8 percent by 2008. Thus, the percentage working over state pension age in this paper captures the national changing picture. In any case, the majority of those working beyond SPA did so for only a relatively short period of time. The highest number of years worked was 19.33 years, but the mean number of years worked (for those who undertook some paid work) was only 3.26 years. The median was low at 1.97 years, with the mode being only 0.92 years spent in paid work beyond state pension age. So, whilst a few extended work for many years after state pension age, the majority worked for only a year or less.

In the remainder of the article, we will examine the relationship between work history and working beyond state pension age, and how this impacts before and after controls. This is primarily to understand the impact of work history, regardless of income – but the impact of other factors will also be considered. We shall first examine the association between certain financial resources and working beyond state pension age.

Financial resources and working beyond state pension age

Using logistic regression, we aimed to understand the part that income plays in the likelihood of working beyond state pension age. Table 1 shows the odds ratios for working beyond state pension age according to individual income and income sources. The first column shows *bivariate* analysis of the impact of certain financial resources upon working beyond state pension age before accounting for any other factors, the second column holds constant other

financial resources, and the final column controls for all factors listed above in the analysis section (with the financial resources variables entered as a block). An odds ratio over one indicates that the income increases the odds of working beyond state pension age and a figure below one indicates that it decreases the chances. The odds ratio is relative, and thus indicates the odds of working beyond state pension age relative to the reference group (*ref* in the table).

It is clear that having a low individual non-labour income is an important predictor for working beyond state pension age. The bivariate analysis shows that having a low personal income (under £500 a month) significantly *increases* the odds of working beyond state pension age by 2.34 times, relative to having a very high personal income (over £1500 a month). Those with a moderately low income (£500-£750 a month) are 1.4 times more likely to work longer, although the association is only just significant. Those with higher incomes are not more likely than those with a very high income to work beyond state pension age. After controlling for other financial resources variables, the association remains the same. After controlling for other factors, there is a slight increase in the odds ratio, and it remains significant. Therefore, those with a very low income are more likely to extend work, even after controlling for other factors. This supports the assumption that people work longer if resources are low, presumably to build up further retirement income.

Receiving a means tested benefit might decrease incentive to work longer, despite a low income, because taking up (a certain number of hours in) paid work would mean losing entitlement to that benefit. Indeed, the binary association indicates that those in receipt of income support are 36.1 percent *less* likely than those not in receipt to work beyond state pension age. However, after controlling for other financial resources, this becomes no longer significant. Thus, it appears that other financial resources are more important for a decision to extend than the disincentive to extend working life beyond state pension age associated with income support.

Type of income may also be important when making a decision whether to work beyond state pension age. We examined pension income and income from investment and savings. Whilst 61.7 percent of the sample has some investment income and 40.1 percent has an occupational pension, only 7.1 percent hold a private pension. This is likely to be a cohort affect, with private pensions becoming more prevalent in more recent times (Gill, 2003), born out by the fact that the most recent cohort in our study make up 53 percent of those with a private pension. However, private pensions are also becoming more important, with a decent pension income likely to be reliant upon having a good private pension (Sefton, Evandrou and Falkingham 2011).

The type of pension income impacts differently upon extending paid work. Table 1 shows that having some occupational pension income significantly *reduces* the odds of extending work without controls, which suggests that the ability to draw occupational pensions early influences early retirement, and supports other studies that have found that the nature of occupational schemes can influence the age at which someone retires (Vickerstaff et al., 2004, Banks and Tetlow,

2008). However, this becomes non-significant after accounting for other financial resource variables. This may be because other factors associated with having an occupational income, such as high income, are more influential in a decision not to work longer than the occupational pension itself.

Having some private pension significantly *increases* the odds of working beyond state pension age by 60.9 percent. The odds ratio increases, and remains significant after other factors are controlled for; those with some private pension income are 77.1 percent more likely to work beyond state pension age than those without private pension income. It may be that those with a private pension have more to gain financially by working longer than those without as this will enable them to top up their pension. For those without, extending work may draw lower returns financially, making it in balance less attractive. But, it may be that the type of pension received is closely related to work history - those with a private pension may have undertaken jobs, such as part time work, which are less likely to have access to occupational pensions (Ginn, 2003).

Table 1 about here.

Table 1: Logistic regression for the odds of working beyond state pension age according to financial resources

	Without controls	With other financial resource controls	With all controls
Personal non labour income			
£1500+	<i>ref</i>	<i>ref</i>	<i>ref</i>
under £500	2.234***	2.248***	2.283**
£500-£750	1.421*	1.492*	1.509*
£750 to £1000	1.225	1.294	1.363
£1000 to £1500	1.001	1.053	1.144
Income support income			
None	<i>Ref</i>	<i>ref</i>	<i>ref</i>
Some	0.639**	0.718	0.711
Occupational pension income			
None	<i>Ref</i>	<i>ref</i>	<i>ref</i>
Some	0.689***	0.825	0.848
Private pension income			
None	<i>Ref</i>	<i>ref</i>	<i>ref</i>
Some	1.609**	1.694**	1.771**
Investment /saving income			
None	<i>Ref</i>	<i>ref</i>	<i>ref</i>
Some	1.186	1.254*	1.160
Financial expectations for the year ahead			
About the same	<i>Ref</i>	<i>ref</i>	<i>ref</i>
Better than now	0.914	0.907	0.842
Worse than now	0.873	0.885	0.837
Log likelihood:		2877.088	2317.635
Nagelkerke R Square:		0.041	0.092

* < 0.05 ** < 0.01 *** < 0.001

Work history and working beyond state pension age

Next we examine work histories, and how they impact upon working beyond state pension age. We examine duration and nature of employment, unemployment and inactivity and the associations with working beyond state pension age for all older people. We want to understand whether people with longer employment or shorter spells of inactivity are more or less likely to work beyond state pension age. Does part time work increase the likelihood for working beyond state pension age, and how do certain types of inactivity impact more upon working beyond state pension age?

Those extending paid work had different work history profiles, on average, compared to those who did not: Those working beyond state pension age had undertaken a mean average of 31.7 years in employment, and 20.9 years in full time employment, but only three years in part time. This is compared with those who did not undertake any paid work beyond state pension age, who had been employed for an average of 26.8 years, with 18.8 years full time, and 7.7 years part-time. Moreover, those employed beyond state pension age had only spent an average of 8.7 years inactive (including periods of unemployment), with 8 years looking after the family / on maternity leave compared to 14.2 years inactive and 9.2 years looking after the family/ on maternity leave for those who did not extend working life. Thus, from these descriptive statistics, it appears that those extending working life had had greater attachment to the work place than those not extending working life, who had experienced more broken work histories. Thus, contrary to the theory that those extending work are potentially less financially prepared for retirement, work histories suggest that it is in fact those with fuller work histories who work longer. This warrants further investigation with binary and multivariate logistic regression analysis to understand how work history increases or decreases the likelihood of working beyond state pension age.

First, we examine the impact that the number of years in employment has upon the odds of working beyond state pension age (table 2). If people extend paid work for income accumulation, we would expect longer years in employment to *decrease* the odds of extending work. This is partly because state pension entitlement is linked to years employed, being lower for individuals who have not worked the full number of qualifying years. But it is also because, for women, there is evidence of a strong link between duration of past employment and *private* income in old age (Sefton, Evandrou and Falkingham 2011). Given the findings above that low income level is related to working beyond state pension age, we would anticipate that those with longer labour market attachment (and higher pension income) would lead to lower propensity to extend work after state pension years.

However, whilst the number of years in employment does appear to be important for working beyond state pension age, this is not in the way anticipated. Before controls, being employed for longer significantly *increases* the odds of extending work compared to being employed for less than five years.

The effect is curvilinear, with the odds increasing with years employed up to 30 years of employment and falling there after. This is likely to be related to the profile of those working very long years – they are much more likely to have a higher income than those working for fewer years, more likely to be male and less likely to be divorced/ separated or widowed. These factors are all related to a lower propensity to working longer, and thus potentially contributing to the curvilinear pattern. We therefore need to understand how duration of employment is related to extending working beyond SPA, taking other factors into account.

After the controls are added, duration of employment remains highly significant but the effect becomes stronger and linearⁱⁱⁱ – thus the more years worked, the higher the odds of working beyond state pension age. Indeed, those working 35 years or more were 25.510 times more likely than those who had been employed for less than five years to work beyond state pension age. Thus, after controlling for other factors, working for more years during working life *increases* the likelihood of working beyond state pension age. This indicates that those with the lowest attachment to the labour market, and seemingly the most in need to extend work to build up retirement income, were actually *least* likely to so do. This maybe due to reduced experience as a direct result of the low amount of time spent in the work place, and thus reduced ability to negotiate employment. Or it may be related to potentially lower returns for extending paid work for this group. Indeed, further analysis shows that those who had been in employment for less than five years were the least likely to hold a private or occupational pension, and thus working longer would be less likely to offer an opportunity to increase an existing pension pot.

In addition to years in employment, the type of contract, and the duration of employment in that contract, is likely to impact upon working beyond state pension age. Part time employment is less likely to be covered by an occupational or private pension scheme, be more heavily concentrated in lower-status occupations (Sefton, Evandrou and Falkingham 2011), and to be lower paid. Indeed, Sefton, Evandrou and Falkingham (2011) found that it was *full time* employment that really mattered for women's income after state pension age. Therefore, we might expect those spending longer years in part time work to have a higher propensity to extend paid work and those spending more of their working lives in full time work to be less likely to work beyond state pension age. Indeed, table 2 shows that those working mainly part time or in mixed employment were significantly more likely to extend paid work than those working predominantly full time all their working lives, with part time work attracting the highest odds. This remains significant after controls are added, although the odds ratios are dampened, with the financial resource and demographic block responsible for the dampening effects. Thus, whilst the higher odds of extending working for predominantly part time workers can partly be explained by income levels and resources, part time work appears to be important for working beyond state pension age, regardless of income.

The impact of employment type may interact with length of employment to influence extending working life. A long career was defined as being employed

for over 30 years, a short career for 15-30 years. For a career to be treated as predominantly full or part time, the respondent had to be in this type of contract for at least two third of the years worked. A mixed career was defined as being in neither predominantly in a part-time or full-time contract.

All varieties of career pattern were highly significant before and after controls were added – increasing the odds of extending work compared to being active for less than 15 years. For all patterns, accounting for financial resources only served to increase the odds of working beyond state pension age, but particularly for long mixed careers and long full time careers. This is because those with long mixed, and, especially, long full time careers, are more likely to have higher incomes, compared to the other groups. Thus, income dampens the odds of extending working life for this group if not accounted for.

After accounting for all other factors, there was also greater variation in the odds ratios between the different mixes of career. Those with careers that were predominantly full time were the least likely to extend paid work, but especially if the career was short. Those with careers involving part time work were the most likely to extend, but especially if they were long. Thus it is not simply long or short careers that matter but whether they are mainly full time, mixed or part time.

Table 2 about here.

Table 2: Logistic regression of the odds of working beyond state pension age by type and duration of employment

	Without controls	With controls
Number of years in employment		
<i>Employed less than 5 years</i>	<i>Ref</i>	<i>Ref</i>
Employed 5-10 years	2.454*	2.432*
Employed 10-15 years	4.870***	5.630***
Employed 15-20 years	8.499***	10.361***
Employed 20 to 25 years	9.510***	13.306***
Employed 25 to 30 years	10.800***	14.628***
Employed 30 to 35 years	9.079***	15.411***
Employed 35+ years	6.980***	25.510***
<i>Log likelihood:</i>	<i>3045.728</i>	<i>2128.505</i>
<i>Nagelkerke R Square:</i>	<i>0.079</i>	<i>0.210</i>
Type of contract		
<i>Mainly full time</i>	<i>ref</i>	<i>ref</i>
Mainly part time	3.144***	2.632***
Mixed	2.820***	2.631***
<i>Log likelihood:</i>	<i>2939.255</i>	<i>2160.999</i>
<i>Nagelkerke R Square:</i>	<i>0.080</i>	<i>0.147</i>
Pattern of employment (a)		
<i>Active for less than 15 years</i>	<i>ref</i>	<i>ref</i>
Short career, mostly part time	7.297***	7.687***
Long career, mostly part time	10.611***	10.964***
Short career, mixed	5.804***	6.663***
Long career, mixed	7.047***	13.799***
Short career, mostly full time	2.824**	3.912***
Long career, mostly full time	2.415***	5.814***
<i>Log likelihood:</i>	<i>2957.004</i>	<i>2146.565</i>
<i>Nagelkerke R Square:</i>	<i>0.124</i>	<i>0.211</i>

* < 0.05 ** < 0.01 *** < 0.001

(a) A long career was defined as being employed for over 30 years, a short career for 15-30 years. For a career to be treated as predominantly full or part time, the respondent had to be in this type of contract for at least two third of the years worked. A mixed career was defined as being in neither predominantly in a part-time or full-time contract.

Duration and timing of career

We have seen how length and type of employment is important for working beyond state pension age, even accounting for financial resources and other factors. Examining timing of career confirms this. Sefton, Evandrou and Falkingham's (2011) study on older women noted that working for most of one's 50s, regardless of whether the career had been interrupted, mattered the most for income in old age. If income is a motivator for working beyond state pension age, it would be expected that working late in one's career would therefore *reduce* the odds of extending working life.

What we observe is that working late does have the greatest impact in terms of extending working life, but not in the way anticipated (table 3). Working for

most of ones 50s significantly *increased* the odds of working beyond state pension age, and controlling for various socio-economic factors, strengthened this impact. Controlling for other factors, those with short late careers were 39.241 times more likely than those active for less than 15 years to extend working life. However, *not* working for most of ones 50s, even with long periods of employment early on in ones career did not significantly impact upon working beyond state pension age. Thus, timing of work is important for extending working life. Those working immediately prior to state pension age may be better able to negotiate working beyond – by continuing in their current position or using their recent experience to find other employment.

Table 3 about here.

Table 3: Logistic regressions for the odds of working beyond state pension age by duration and timing of employment

	Without controls	With controls
Duration and timing of employment (a)		
<i>Mostly inactive throughout</i>	<i>Ref</i>	<i>ref</i>
Active throughout	6.892***	17.550***
Mostly active, retires early	0.606	1.134
Mostly active with mid career break	15.937***	20.171***
Mostly active with early career break	8.203***	15.984***
Extended early	1.362	1.921
Extended interrupted	13.363***	15.051***
Extended late	18.185***	21.257***
Short early	1.477	1.428
Short mid	1.514	1.675
Short late	31.572***	39.241***
<i>Log likelihood:</i>	<i>2793.825</i>	<i>1979.123</i>
<i>Nagelkerke R Square:</i>	<i>0.201</i>	<i>0.296</i>

* < 0.05 ** < 0.01 *** < 0.001

(a) Respondents' working lives are divided into four ten-year periods, covering their 20s, 30s, 40s and 50s and categorised as follows:

- Mostly inactive throughout: not employed for majority of any of the four ten-year periods.
- Active throughout: Employed for majority of every ten-year period.
- Mostly active, retired early: Employed for majority of 20s, 30s and 40s, but not 50s.
- Mostly active, mid-career break: Employed for majority of 20s, 30s and 50s or 20s, 40s and 50s.
- Mostly active, early career break: Employed for majority of 30s, 40s and 50s, but not 20s.
- Extended early/mid career: Employed for majority of their 20s and 30s or 30s and 40s.
- Extended, interrupted career: Employed for majority of their 20s/40s, 20s/50s or 30s/50s.
- Extended late career: Employed for majority of their 40s and 50s.
- Short early career: Employed for majority of their 20s (but not in their 30s, 40s or 50s).
- Short mid employment career: Employed for majority of either their 30s or 40s.
- Short late career: Employed for majority of their 50s (but not their 20s, 30s or 40s).

Inactivity

Thus far, it has been indicated that being inactive for a long period of working life reduces the likelihood of extending work beyond state pension age, even after other factors are accounted for. This appears contrary to the expectation that people extend paid work beyond state pension age to boost their current income or to build up income for the future. Indeed, especially given that those

with longer periods of inactivity are most likely to have a low income, relative to those working nearly all their lives, holding other factors constant. Thus the impact of inactivity upon extending work needs to be further examined. What impact do duration and type of inactivity have?^{iv}

Table 4 shows that longer durations of inactivity decrease the odds of working beyond state pension age compared to experiencing inactivity of less than 6 months. Including the control variables serves to reduce the odds ratios, and thus increase the effect, although controlling for the financial resources block itself had little impact on the odds ratios. There is a linear effect – the longer the inactivity the lower the likelihood of extending working life relative to those with inactivity for less than 6 months. Thus the odds of working beyond state pension age are reduced by 77.6 percent for those inactive for 6 months to 5 years and by 98 percent for those inactive for more than 30 years. It is clear that longer periods of inactivity significantly reduce the likelihood of extending paid work beyond state pension age.

But do all types of inactivity reduce the likelihood of extending working life? Table 4 also shows the impact of retiring early, of unemployment and sickness, and of family care as well as ‘other’ inactivity on working beyond state pension age. Unsurprisingly, retiring early, compared to not, was statistically significant, with a large negative effect upon a decision to extend working life. Taking into account financial resources and other controls had little impact upon the odds ratios. The number of years retiring early had some effect – with those retiring more than 5 years early having the lowest odds of extending working life. Having said this, early retirement reduced the odds of extending working life by more than 95 percent, regardless of how early the older person retired. Taking this with the finding above that working after the age of 50 has large positive effects for extending working life reiterates the importance of labour market attachment late in life in a decision to extend working life beyond state pension age. But also, those who retire early may be more able to afford to do so, and thus be less likely to work longer anyway. Whilst we have controlled for certain financial resources, other potentially salient factors have not been accounted for, such as occupation. Those working in certain occupations, particularly those in the public sector, may be able to draw their occupational pension early, influencing a decision to retire early.

Being unemployed or sick for more than two years compared to never being unemployed or sick significantly reduces the odds of extending working life by 82.2 percent after other variables have been accounted for. Introducing the controls marginally dampens the effect. Being unemployed or sick for under two years has no significant impact upon a decision to work beyond state pension age. It may be that those sick or unemployed for more than two years have reduced negotiating power. Or that a longer term illness is more likely to affect ability to extend work, although health and disability have been accounted for in the regression. Crucially, it may be that those long term sick or unemployed are more likely to be so later in their working life, with low attachment to the labour market immediately prior to state pension age being associated with a lower propensity to working longer.

Undertaking family care has highly significant effects upon a decision to work beyond state pension age before controls are in place, although the picture is not straight forward. Those older people who had undertaken family care for less than 20 years were more likely to extend working life. Those undertaking family care for the shortest period of time – less than five years – had the highest odds of extending working, being 2.736 times more likely to extend working life than those never undertaking family care. However, those having undertaken family care long term for more than 20 years were *less* likely to work beyond state pension age – being 68.1 percent less likely to extend working life than those older people who had never undertaken family care. Further analysis shows that this group were less likely than the others to hold an occupational pension (and to a lesser extent, a private pension), and thus have less to gain from working after state pension age. Thus, it is important to control for financial resources – and other factors.

After accounting for other factors, the odds ratios for those undertaking family care for between 5-10 and 10-20 years are no longer significant, and those for under 5 years remain only just significant. Including only the financial resources block specifically dampens the affect for those with under 20 years family care experience. This indicates that low individual income plays a part in increasing the propensity to extend work for those who have undertaken under 20 years of family care, but does not fully explain this association. Rather, adding the demographic block, which includes sex, is more important. Once this block is included the odds ratios are no longer significant. For those undertaking family care for more than 20 years, the odds ratios remain highly significant even after accounting for other factors, with the affects even increasing slightly – those undertaking family care for more than 20 years being 76.9 percent less likely to extend working life than those never undertaking family care. So, after controlling for other variables, the impact of caring for family long term becomes stronger, which suggests it is the act of long term caring itself, that reduces the likelihood of extending working. This again appears to reflect the importance of labour market attachment for extending working life – with very lengthy spells out of the labour market being detrimental on the ability to work beyond state pension age, despite the obvious implications for income in old age.

Table 4 about here.

Table 4 Logistic regression of working beyond state pension age by type and duration of inactivity

	Without controls	With controls
Number of years inactive		
<i>Inactive for less than 6 months</i>	<i>ref</i>	<i>ref</i>
Inactive for 6 months to 5 years	0.312***	0.224***
Inactive 5 years to 10 years	0.437***	0.191***
Inactive 10-20 years	0.558***	0.183***
Inactive 20-30 years	0.389***	0.106***
Inactive 30+ years	0.084***	0.020***
<i>Log likelihood:</i>	<i>2983.839</i>	<i>2044.404</i>
<i>Nagelkerke R Square:</i>	<i>0.110</i>	<i>0.260</i>
Type of Inactivity		
<i>Did not retire early</i>	<i>ref</i>	<i>ref</i>
Retired Early <2 years	0.063 ***	0.052***
Retired Early 2-5 years	0.046***	0.046***
Retired Early 5 years or more	0.023***	0.022***
 <i>Was not unemployed/ sick</i>		
Unemployed or sick <2 years	1.152	1.345
2+ years	0.128***	0.182***
 <i>No family care</i>		
<5 years	2.736***	2.093*
5-10 years	2.079***	1.572
10-20 years	1.942***	1.352
20+ years	0.319***	0.231***
 <i>Never other inactive</i>		
< 2 years	1.269	1.086
2+ years	2.168*	1.429
<i>Log likelihood:</i>	<i>2250.141</i>	<i>1670.845</i>
<i>Nagelkerke R Square:</i>	<i>0.428</i>	<i>0.455</i>

*< 0.05 ** <0.01 ***<0.001

Conclusion and discussion

Recent policies to encourage people to extend paid work beyond state pension age have focused upon extending the state pension age so people are forced to work longer before receiving the state pension and also phasing out the default retirement age so people can more easily extend without automatic retirement. Policies focusing upon age assume that people will have the ability, and inclination to work longer once age barriers are removed. However, this paper suggests that even those seemingly most in need of working beyond state pension age are not able to do so. This brings into question whether everyone has equal ability, and opportunity, to work longer, and whether actually those most in financial need of working longer are able to do so.

This research examined the relationship between work life history and working beyond state pension age (SPA) using retrospective data from the first 14 waves of the British Household Panel Survey. It found that low personal income increases the

odds of extending paid working, even after controlling for other factors. At the same time, work history is important for predicting whether someone will work after SPA, even after income (and other factors) are accounted for. Thus, work history matters for a decision about whether to work longer. But exactly how it matters is not straightforward.

Attachment to the labour market prior to SPA influences extending work thereafter. Indeed, whilst lengthy years in employment increase the likelihood of extending working life, periods of inactivity reduce the likelihood. This indicates that those with broken work histories, and seemingly in the most financial need, are less likely to work beyond SPA. Logically, this may be because this group, who are less likely to have an occupational or private pension, have less to gain financially from extending paid work. But even after income level and sources have been accounted for, this association remains. This may be for two reasons. First, those with broken work histories may be less *able* to extend work due to reduced negotiating power in the labour market. Second, extending work may be less attractive for those with broken work histories than those with more rewarding careers, who may be more willing to extend their career further. Indeed, those with broken work histories may have less access to flexible working choices, which make extending paid work a more desirable option, with high quality flexible jobs only being open to those all ready well placed in terms of labour market position (Phillipson and Smith, 2005). Thus, the government's emphasis on enabling greater flexibility to allow people to choose a phased approach to retirement (DWP, 2006) will not necessarily be achievable for all older people. Thus, for those with broken work histories, extending work is likely not only to be more difficult due to lower labour market attachment in the first place, but less desirable. As studies examining early retirement have indicated, it is perhaps the quality of work in terms of the balance between effort, reward and control that is important in a decision about whether to work longer (Blekesaune, Bryan, and Taylor 2008).

For those in employment, type of contract matters: Part time employment increases the likelihood of extending work, especially if the part-time career has been lengthy. Whilst low income explains some of part-timers' propensity to work longer, this certainly does not tell the whole story, as the association remains significant after controlling for financial resources. It could be that part time work is more compatible with extending work, with studies showing that flexible working is attractive to employees reaching state pension age (eg. Vickerstaff, 2007). Those all ready employed in this manner may find it easier to continue working without the need to negotiate a change in hours with their current employers. Those in full time positions would need to balance financial need to extend work against the benefits of retirement and easiness to request part time working (Yeandle, 2005). This emphasizes the above point that flexible choices are more easily available for those all ready well placed. But full time workers in our sample may also be restricted by pension status – with defined benefit schemes lowering the attraction of reducing hours immediately prior to state pension age since pension income is based on earnings in the last few years prior to retirement. More recently, this barrier, however, has to some extent been removed, with employees now able to draw some pension whilst working reduced hours by the same employer (since 2006).

This paper also found that timing of employment matters, and that it is not simply a long and rewarding career that enables and entices people to extend work. Indeed, employment late in life is crucial for extending working life. This is not very surprising given the above conclusions about effort and ability to negotiate working longer seemingly being important for a decision to work longer. Thus, extending work is easier and requires less effort for those already in employment immediately prior to state pension age, than for those not in work who have to return to employment before even considering the possibility of working beyond state pension age. Interestingly, those with short late careers are the most likely to extend paid work. This emphasizes further that being in a job immediately prior to state pension age is vital for extending working for longer, even to the point that earlier work history does not matter. That this association is stronger after financial resources and other factors are accounted for indicates further the importance of negotiating ability to extend. Indeed, in December – February 2011, those unemployed aged over 50 (and under state pension age) were most likely of all age groups to experience long term (over 12 months) unemployment (Labour Force Survey). This emphasizes the difficult job the government has when encouraging longer working life amongst those approaching state pension age. This has not completely passed policy by, with specialist back to work support available for the over-50s group, including New Deal 50plus. But this does not provide help until six months after an initial claim, with the increased likelihood that the older unemployed will become discouraged before help to get back to work can be accessed (Vegeris, Smeaton and Sahin-Dikmen 2010).

Focusing on age-related policy misses the point that those not working late in life are going to be able to work longer simply by the removal of age barriers or financial incentives to do so. This leaves a group doubly disadvantaged - first in their ability to build up pension income in the years prior to retirement, which is especially important for certain occupational pensions which take into account earnings in the last few years worked (which are likely to increase with age and experience) (Vickerstaff, 2007). And second in their ability to extend working life to make up for this. Recent age related policy to speed up the later state pension age will mean that this group have a longer wait to draw the state pension, and little time to prepare for this, (Age, UK, 2010) with the resultant increased threat of poverty. Policies supporting older people back into work are therefore important not only for their current income levels, and ability to build up a pension income late in working life, but also for their ability to work beyond state pension age and further top up their pension in order to avert low income after state pension age.

This paper has thus indicated that income is not the only important (de)-motivator to extend work. Work history is important, regardless of income. It appears that having strong labour market attachment, and late in life attachment especially, enables extending working beyond state pension age. Those with labour market dis-attachment, are least able to do so. Labour market dis-attachment leads to a double disadvantage – low pension income built up during their working life and low ability to work longer to make up for this. Thus the current focus on age-related policies will do little to enable those with reduced negotiating power in the labour market to access quality, flexible employment and by doing so offering them enough incentive to work longer. Policy needs to concentrate upon being more inclusive to incorporate those with lower negotiating power in the labour market beyond state pension age.

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ⁱ Sensitivity analysis has been undertaken using household income data. Generally, the results did not change but the sample size was reduced.

ⁱⁱ Income support has now been superseded by pension credit for those over state pension age, but was only measured in the BHPS from 2004, the final year of our study. For this reason, income support rather than pension credit has been accounted for.

ⁱⁱⁱ Controlling for sex makes the effect becomes linear because men and women's working lives impact very differently upon working beyond state pension age.

^{iv} Please note that unemployment has been treated as inactivity.